



J & S Instruments, Inc.

3071 State Route 72 South
Springfield, Ohio 45505-5023
Phone 937-325-7499
Fax 937-323-9588

WS-200 SERIES WIND SENSORS DATA SHEET

The WS-200 Series Wind Sensors are designed for applications where a 3-Cup Anemometer and Vane are required. The vane is constructed of expanded polystyrene for maximum sensitivity while the cups are constructed of lightweight plastic for a very low threshold. The WS-205 Wind Speed Sensor and the WS-210 Wind Direction Sensor are combined to make the WS-215 Combination Wind Speed and Direction Sensor. All three models come with mounting hardware for a standard one inch mast and six feet of cable for each sensor.

The WS-205 Wind Speed Sensor is a three cup anemometer which employs a sensitive DC tach-generator to measure and output a linearly proportional voltage. A unique water shedding design along with stainless steel ball bearings offer long life and minimum maintenance in the field while still being sensitive enough for detailed wind studies. The unit is constructed of tough ultraviolet resistant plastic.

The WS-210 Wind Direction Sensor is a Gill Microvane balanced on stainless steel ball bearings for easy rotation in minimum wind. A conductive plastic potentiometer offers passive resistance measurement proportional to the user supplied excitation voltage and can be expected to last 50,000,000 revolutions.

The WS-215 Combination Wind Speed and Direction Sensor finds all of the exceptional attributes of the WS-205 and WS-210 combined into a common mounting assembly. Both units are mounted on a crossarm and have their own six foot cable so if one unit were to fail then the other would continue to operate. The wide stance of the crossarm minimizes potential wake effects.

SPECIFICATIONS:

RANGE

Wind Speed: 0-70 MPH
Wind Direction: 0-360° (5° dead band)

ACCURACY

Wind Speed: ± 0.7 MPH
Wind Direction: $\pm 3^\circ$

THRESHOLD

Wind Speed: 1.1 MPH
Wind Direction: 0.9 MPH @ 10°

(continued)

RESPONSE

Distance constant: 7.5 Ft.
Delay Distance: 3.0 Ft.
Damping Ratio: 0.51
Damped wavelength: 15.1 Ft.

FULL SCALE OUTPUT

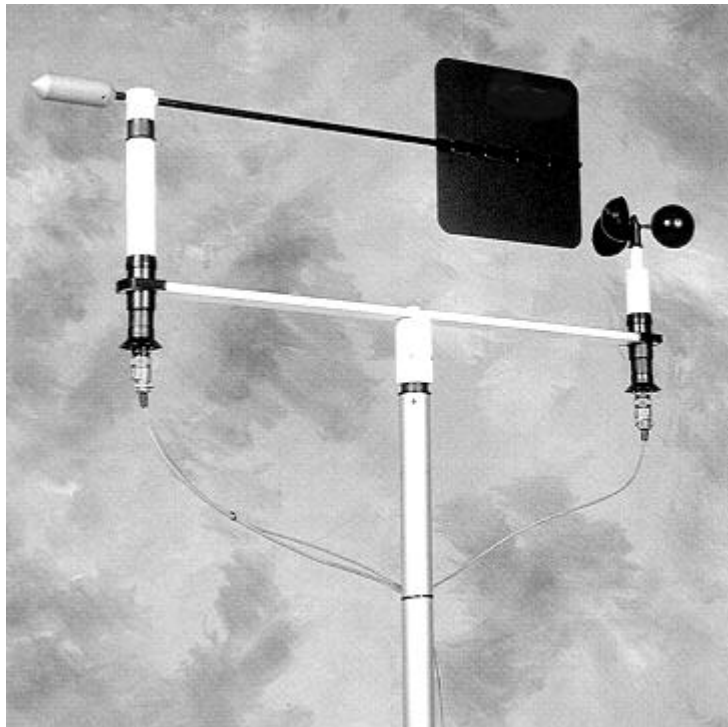
Wind Speed: 0-2.625 VDC
Wind Direction: 0-10K ohm

DIMENSIONS

	Vane	Anemometer	Crossarm
Length:	25.6 In.		30.0 In.
Height:	18.0 In.	12.5 In.	
Cup (Dia.):		2.5 In.	
Cupwheel (Dia.):		7.0 In.	

WEIGHT

WS-205: 2.6 Lbs.
WS-210: 2.6 Lbs.
WS-215: 5.2 Lbs



The WS-200 Series Wind Sensors come complete with a full one year warranty against defects in materials or workmanship.

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